Hydrologic Warning Systems
Overview

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National Hydrologic Warning Council

Hydrologic Warning Systems
Informational Workshop
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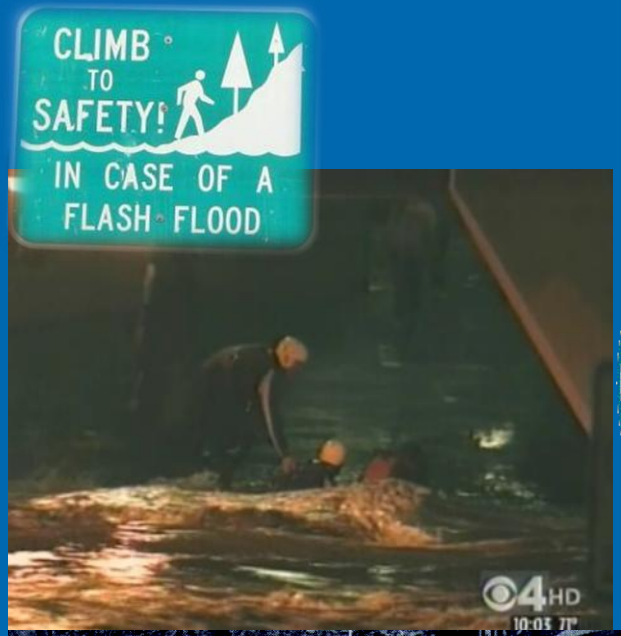
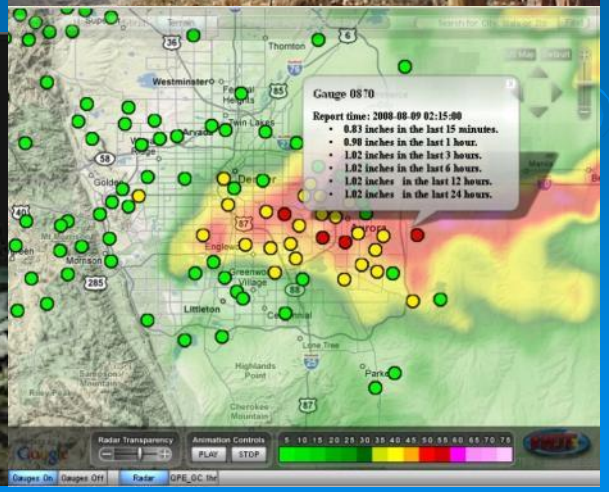
www.hydrologicwarning.org

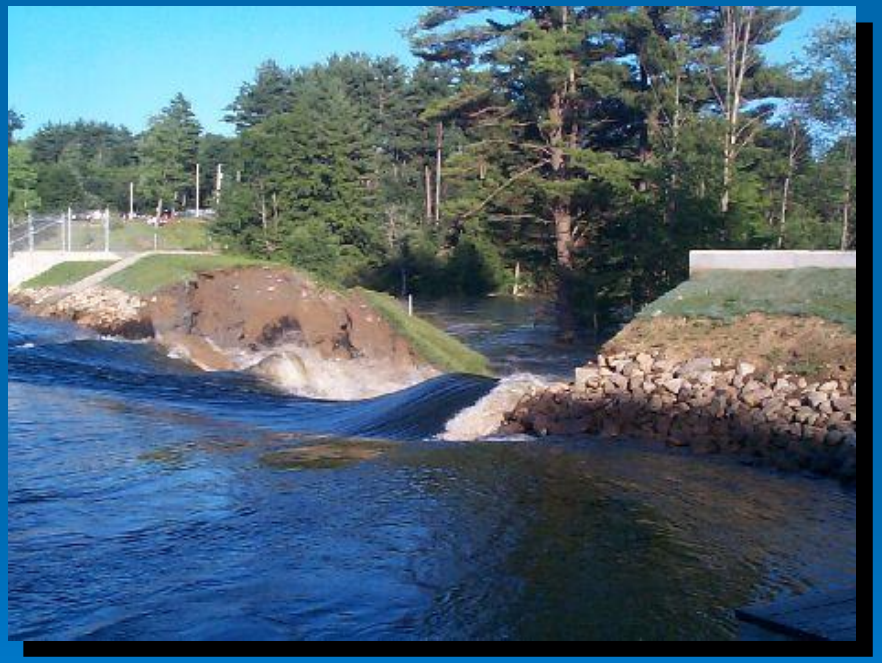




Hydrologic Warning Systems
Today's Focus

- What is a HWS, and what can it do for you?
- What does a future operator of a HWS need to know?

Hydrologic Warning Systems
Challenges



- What's going on when too much water falls on your area, or flows into it?
- What happens when nature overwhelms our living space?
- What happens when what we build breaks?

Hydrologic Warning Systems
Function/Benefits

- A HWS is not a substitute for floodplain management and control structures
- Includes components that inform us so we can warn others
- Offers cost-effective solutions

Hydrologic Warning Systems
Components

- Observing systems
- Data commmunications
- Diagnostic/predictive models
- Warning systems
- Action plans
- Preparedness plans

Hydrologic Warning Systems
Design Considerations

- Get expert help
- Decide what to measure and how to share it
- Consider alternatives
- Focus on critical sites
- Optimize design
- Include additional data (e.g., radar)

Hydrologic Warning Systems
Operational Factors

- System must be located, installed, and maintained properly
- Managers and technicians all need training
- Operating budgets are crucial

Hydrologic Warning Systems
Funding Sources

- Federal
  - US Army Corps Assistance to States
  - FEMA Pre-Disaster, Flood Mitigation Assistance, Hazard Mitigation Grants
- State/Local
  - State Flood Damage Reduction Grants
  - County Stormwater Utility

Hydrologic Warning Systems
Useful References

- NWS Automated Flood Warning System Handbook
  - http://www.weather.gov/oh/docs/alfws-handbook/
- NWS Flood Warning Systems Directive
  - http://www.weather.gov/directives/sym/pd01009041curr.pdf
- NWS Flood Warning Systems Manual
  - http://www.weather.gov/directives/sym/pd01009042curr.pdf

Hydrologic Warning Systems
Conclusions

- A HWS will increase situational "understanding" if:
  - It is well designed, maintained, and used properly
  - Everyone gets trained and practices
  - Everyone gets involved!

Q & A

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